



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,341	04/04/2001	Juan F. de la Mora		3900

7590
10/01/2003
Juan F. de la Mora
80 Cold Spring Street
New Haven, CT 06511

EXAMINER

NGUYEN, KIET TUAN

ART UNIT PAPER NUMBER

2881

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,341

Applicant(s)

DE LA MORA ET AL.

Examiner

K.Nguyen

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

Objected Informalities

The disclosure is objected to because of the following informalities:

In The Specification

Page 2, line 3, "60/194,906" should be -- 60/194,903 --.

Page 15, line 2, "FIG. 1" should be -- FIGS. 1A and 1B --.

Appropriate correction is required.

Rejection Under 35 U.S.C. 112

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite for reciting the limitation "droplets and/or ions" in line 5. How is the electric field dispersed the liquid for providing both droplets and/or ions?

Claim 2 is indefinite for reciting the limitation "it does not boil or freeze when it enters said low pressure region" in lines 1-2. What is it that does not boil or freeze? What is it that enters the low pressure region?

Claim 3 is indefinite for reciting the limitation "S/m" in line 1. What is the S/m which has no definition?

Claim 4 is indefinite for reciting the limitation "it is supplied" in line 1. What is it supplied?

Claim 4 is indefinite for reciting the limitation "the meniscus ... electric field" in lines 2-6.

Art Unit: 2881

What is the feature that assumes the well known cone-jet? What are those of the exit cross sectional area of the duct?

Claim 4 recites the limitation "the tip" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the exit cross sectional area" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the duct" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 is indefinite for reciting the limitation "these components" in line 4. What are these components?

Claim 7 is indefinite for reciting the limitation "droplets and/or ions" in line 7. How is the electric field dispersed the liquid for providing both droplets and/or ions?

Claim 7 is indefinite for reciting the limitation "those of the arriving liquid" in lines 8-9. What are those of the arriving liquid?

Claim 7 is indefinite for reciting the limitation "it flows" in line 10. What is it that flows?

Claim 10 is indefinite for reciting the limitation "S/m" in line 2. What is the S/m which has no definition?

Claim 11 is indefinite for reciting the limitation "S/m" in line 3. What is the S/m which has no definition?

Rejection Under 35 U.S.C. 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2881

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the applicant's admission in line 11 of page 2 to line 14 of page 7.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Whitehouse et al. (5,844,237), Whitehouse et al. (5,306,412) and Jorgenson et al. (5,115,131).

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wilm et al. (Electrospray and Taylor Cone theory, Dole's beam of macromolecules at last?).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Laukien et al. discloses an ion source for a mass spectrometer having means for producing a Taylor cone; and

2) Hirabayashi et al discloses an ion source for a mass spectrometer having means for producing a Taylor cone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner *Kiet T. Nguyen* whose telephone number is (703) 308-4855.

Art Unit: 2881

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

K.T.N/Primary

9/21/03



KIET T. NGUYEN
PRIMARY EXAMINER